

I claim:

1. A device, comprising:

a receiver designed to receive a communication from at least one other device;
a transmitter designed to transmit messages to at least one other device;
an application software stored in the device; and
a list of other devices including the application software.

2. A device according to claim 1, wherein the list of other devices includes a route to each other device including the application software.

3. A device according to claim 1, further comprising:
a memory; and
a routing table stored in the memory, the routing table including the list of other devices including the application software.

4. A device according to claim 3, wherein the routing table is designed to store a route to at least one other reachable device including the application software.

5. A device according to claim 1, further comprising a list of other devices reachable from a second device, the list of other devices received from the second device using the receiver.

6. A device according to claim 5, further comprising a processor designed to construct the list of other devices including the application software from the list of other devices reachable from the second device.

7. A method for organizing a network, comprising:
operating a first device, the first device including an application software;
identifying a second device with which the first device can communicate; and
determining whether the second device includes the application software.

8. A method according to claim 7, further comprising establishing a communications channel between the first and second device if the second device includes the application software.

5 9. A method according to claim 8, further comprising:
receiving a list of devices reachable from the second device, the list including a third device;
determining whether the third device includes the application software; and
establishing a communications channel from the first device through the second
10 device to the third device if the third device includes the application software.

10 10. A method according to claim 9, further comprising sending messages from the first device to the second device, to be relayed to the third device.

5 11. A method according to claim 10, wherein sending messages from the first device to the second device includes specifying a path from the first device to the third device.

20 12. A method according to claim 9, wherein establishing a communications channel from the first device through the second device to the third device includes establishing a communications channel from the first device through the second device to the third device without regard for any alternative route from the first device to the third device.

25 13. A method according to claim 9, wherein determining whether the third device includes the application software includes receiving from the second device an indication that the third device includes the application software.

30 14. A method according to claim 9, wherein receiving a list of devices reachable from the second device includes receiving an indication that the third device includes the application software.

15. A method according to claim 9, further comprising changing the communications channel from the first device through the second device to the third device to

an alternative communications channel if the alternative communications channel has a lower cost than the communications channel.

16. A method according to claim 8, further comprising:

receiving a list of devices reachable from the second device; and
forwarding the list of devices to a third device within range of the first device.

17. A method according to claim 16, wherein receiving a list of devices reachable from the second device includes receiving a list of devices including the application software reachable from the second device.

18. An article comprising:

a storage medium, said storage medium having stored thereon instructions that, when executed by a computing device, result in:

operating a first device, the first device including an application software;
identifying a second device with which the first device can communicate; and
determining whether the second device includes the application software.

19. An article according to claim 18, wherein the storage medium has further stored thereon instructions, that, when executed by the computing device, result in establishing a communications channel between the first and second device if the second device includes the application software.

20. An article according to claim 19, wherein the storage medium has further stored thereon instructions, that, when executed by the computing device, result in:
receiving a list of devices reachable from the second device, the list including a third device;
determining whether the third device includes the application software; and
establishing a communications channel from the first device through the second device to the third device if the third device includes the application software.

21. An article according to claim 20, wherein the storage medium has further stored thereon instructions, that, when executed by the computing device, result in sending messages from the first device to the second device, to be relayed to the third device.

5 22. An article according to claim 21, wherein sending messages from the first device to the second device includes specifying a path from the first device to the third device.

10 23. An article according to claim 20, wherein establishing a communications channel from the first device through the second device to the third device includes establishing a communications channel from the first device through the second device to the third device without regard for any alternative route from the first device to the third device.

5 24. An article according to claim 20, wherein determining whether the third device includes the application software includes receiving from the second device an indication that the third device includes the application software.

20 25. An article according to claim 20, wherein receiving a list of devices reachable from the second device includes receiving an indication that the third device includes the application.

25 26. An article according to claim 20, further comprising changing the communications channel from the first device through the second device to the third device to an alternative communications channel if the alternative communications channel has a lower cost than the communications channel.

30 27. An article according to claim 19, wherein the storage medium has further stored thereon instructions, that, when executed by the computing device, result in:
receiving a list of devices reachable from the second device; and
forwarding the list of devices to a third device within range of the first device.

28. An article according to claim 27, wherein receiving a list of devices reachable from the second device includes receiving a list of devices including the application software reachable from the second device.